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	Application No.	Applicant(s)	
Notice of Allowability	10/828,712	JOHANSSON ET AL.	
	Examiner	Art Unit	
	H.Jey Tsai	2812	
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHT of the Office or upon petition by the applicant. See 37 CFR 1.313	ears on the cover sheet w (OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is	in this application. If not included nunication will be mailed in due course. T	
1. This communication is responsive to		·	
2. The allowed claim(s) is/are <u>1-15</u> .			
<ul> <li>3.</li></ul>		or (f).	
Certified copies of the priority documents have		on No	
Copies of the certified copies of the priority documents have		<del></del>	rhe .
International Bureau (PCT Rule 17.2(a)).	dumente nave been receiv	od in this national stage application from t	110
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements	S
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	itted. Note the attached Exes reason(s) why the oath o	AMINER'S AMENDMENT or NOTICE OF or declaration is deficient.	=
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	t be submitted.		
(a) including changes required by the Notice of Draftspers	on's Patent Drawing Revie	w ( PTO-948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date	• .		
(b)  including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment o	or in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on he header according to 37 C	the drawings in the front (not the back) of FR 1.121(d).	
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT			
Attachment(s)			
1. Notice of References Cited (PTO-892)		nformal Patent Application (PTO-152)	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	b. ☐ Interview t Paper No	Summary (PTO-413), ./Mail Date	
3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4/21/04	8), 7. \(\sum \) Examiner's	./Mail Date s Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material  4. September 1997  4. Septe	8. 🛛 Examiner's	Statement of Reasons for Allowance	
	9.		

## **Examiner Amendment And Reasons For Allowance**

## Examiner Amendment

An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.

This application is in condition for allowance except for the presence of nonelected claims 16-23. Accordingly, claims 16-23 are canceled.

The application has been amended as follows:

## In the claims:

In claim 1, lines 3, change "characterized" to – comprising --.

In claim 1, line 9, before "epitaxial" insert – n-type and p-type --.

Cancel claims 16-23.

Authorization for this Examiner's Amendment was given in a telephone interview with Mr. B, Slayden, II on August 30, 2005.

## Reasons For Allowance

The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The basis for the allowability is:

Prior art of record does not teach combination of forming in n-type and p-type epitaxial layers field isolation areas around, in a horizontal plane, a portion of the

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epitaxial layers to simultaneously define an n-type doped collector region for the mesa transistor on the subcollector; a p-type doped base region for the mesa transistor thereon; and an n-type doped collector plug on the subcollector, but separated from the n-type doped collector region and the p-type doped base region; and thereafter forming in the p-type doped base region an n-type doped emitter region for the mesa transistor.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Any inquiry of a general nature or clerical matters or relating to the status of this application or proceeding should be directed to the customer service whose telephone number is (703) 308-4357.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. Jey Tsai whose telephone number is (571) 272-1684. The examiner can normally be reached on from 7:00 Am to 4:00 Pm., Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael S. Lebentritt can be reached on (571) 272-1873.

The fax phone number for this Group is 571-273-8300.

hit

8/30/2005

H. Jey'Tsai Primary Examiner Patent Examining Group 2800